

REMARKS

This application has been carefully reviewed in light of the Office Action dated January 10, 2006. Claims 22-24 are currently pending. Claim 22 is the independent claim. New Claims 23 and 24 have been added. It is believed that no new matter is involved in the amendments or arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Art-Based Rejections

In the Office Action, Claim 22 was rejected under 35 U.S.C. §102(b) over USPN 6,255,813 B1 (Isomura),

Applicants respectfully traverses the rejection and submit that the claims herein are patentable in light of the clarifying amendments above and the arguments below.

The Isomura Reference

Isomura is directed to a magnetic sensor for detecting a magnetic field strength having an insulator substrate with first and second surfaces opposite to each other. (*See, Isomura, Col. 2, line 59 to Col. 3, line 3*).

The Claims are Patentable Over the Cited References

The present application is generally directed to an electromagnetic wave controlling device and method of manufacturing the same.

As defined by independent Claim 22, a soft magnetic member includes a resin film as an insulating layer. A metal sublayer is disposed on the insulating layer. A soft magnetic metal layer is disposed on the metal sublayer. The thickness of the

metal sublayer is denoted by s , and the thickness of the soft magnetic metal layer is denoted by p . The relationships hold: $4 \leq p/s \leq 15$ and $100 \text{ nm} < s \leq 1000 \text{ nm}$.

The applied references do not disclose or suggest the above features of the present invention as defined by amended independent Claim 22. In particular, the applied references do not disclose or suggest, “a resin film as an insulating layer... wherein providing that the thickness of said metal sublayer is denoted by s and the thickness of said soft magnetic metal layer is denoted by p , then the relationships hold: $4 \leq p/s \leq 15$ and $100 \text{ nm} < s \leq 1000 \text{ nm}$ ”, as required by independent Claim 22.

The Isomura Reference

According to the Office Action, Isomura in *col. 6, lines 65-67* discloses that an insulating layer can be a resin film, in accordance with the Applicants’ present invention. However, Isomura discloses the use of a resin film in combination with a metal sublayer and soft magnetic metal layer that both have thicknesses, which fall out of Applicants’ claimed parameters. For example in the embodiment associated with the above cited example (*See Isomura, col. 6, line 65- col. 7, line 8*) has a metal sub layer with a thickness $s = 35 \text{ }\mu\text{m}$ (35,000 nm) and a soft magnetic metal layer with a thickness $p = 50 \text{ }\mu\text{m}$. The ratio of $p/s = 50 \text{ }\mu\text{m} / 35 \text{ }\mu\text{m} = 1.43$.

In contrast, the present invention requires “wherein providing that the thickness of said metal sublayer is denoted by s and the thickness of said soft magnetic metal layer is denoted by p , then the relationships hold: $4 \leq p/s \leq 15$ and $100 \text{ nm} < s \leq 1000 \text{ nm}$ ”.

The above cited claim limitations have several advantages. For example, by keeping the ratio between the thickness s of the metal sublayer and the thickness p of the soft magnetic metal layer (p/s) within a certain range, a magnetic coupling between the soft magnetic metal layer and the metal sublayer is increased. (*See*

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Applicants' Specification, page 8, lines 7-11). The Soft magnetic member of the present invention can also be used in a frequency band of 800 MHz or lower. In this case, it is necessary only the thickness of the metal sublayer s and the thickness of the soft magnetic metal layer p holds the relationship $4 \leq p/s \leq 15$ and $100 < s \leq 1000$ nm. (*See Applicants' Specification, page 11, lines 9-17*)

Accordingly, Isomura fails to teach or suggest "a resin film as an insulating layer ... wherein providing that the thickness of said metal sublayer is denoted by s and the thickness of said soft magnetic metal layer is denoted by p , then the relationships hold: $4 \leq p/s \leq 15$ and $100 \text{ nm} < s \leq 1000 \text{ nm}$ ", as required by the claims of the present invention.

Since the applied reference fails to disclose, teach or suggest the above features recited in independent Claim 22, that references cannot be said to anticipate or render obvious the invention which is the subject matter of that claim.

Accordingly, independent Claim 22, is believed to be in condition for allowance and such allowance is respectfully requested.

New Claims 23 and 24 depend directly from independent Claim 22, and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance and such allowance is respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los

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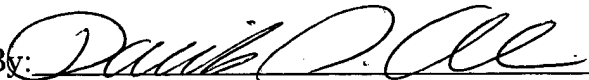
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Angeles, California telephone number (213) 337-6809 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: April 10, 2006

By: 
Dariush G. Adli
Registration No. 51,386
Attorney for Applicant(s)